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MICROSOFT CORPORATION  
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REDMOND, WA 98052

EXAMINER
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CHIUSANO, ANDREW TSUTOMU

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* ERIC M. BORZELLO, RICHARD ANTHONY CARUANA,  
ERIC JOEL HORVITZ, ASHISH KAPOOR, KATHLEEN R. KELLY, and  
CHARLES MARCUS REID III  
(Additional Applicant: Microsoft Corporation)

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Appeal 2017-003797  
Application 13/831,886<sup>1</sup>  
Technology Center 2100

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Before MATTHEW R. CLEMENTS, NORMAN H. BEAMER, and  
MATTHEW J. McNEILL, *Administrative Patent Judges*.

BEAMER, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 1–18 and 20. Claim 19 is cancelled. We have jurisdiction over the pending rejected claims under 35 U.S.C. § 6(b).

We affirm.

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<sup>1</sup> Appellants identify Microsoft Technology Licensing, LLC as the Real Party in Interest. (App. Br. 1.)

## THE INVENTION

Appellants' disclosed and claimed invention is directed to surfacing (*i.e.*, display) of predicted commands within a user interface. (Abstract.) Independent claim 1, reproduced below, is illustrative of the subject matter on appeal:

1. A method for surfacing commands within a user interface of a productivity application, comprising:
  - receiving user specific data for an active user of a productivity application;
  - receiving community data;
  - generating a combined command-to-command transition table using one or more command log views of the user specific data and the community data;
  - selecting predicted commands from the combined command-to-command transition table; and
  - displaying predicted commands.

## REJECTIONS

The Examiner rejected claims 1, 2, 6–9, and 15–18 under 35 U.S.C. § 102(b) as being anticipated by Fitzmaurice (US 2010/0107141 A1, pub. Apr. 29, 2010). (Final Act. 2–5.)

The Examiner rejected claims 3, 12, and 20 under 35 U.S.C. § 103(a) as being unpatentable over Fitzmaurice and Perrow (US 7,284,009 B2, issued Oct. 16, 2007). (Final Act. 6–8.)

The Examiner rejected claims 4 and 13 under 35 U.S.C. § 103(a) as being unpatentable over Fitzmaurice and Harte (US 2012/0047454 A1, pub. Feb. 23, 2012). (Final Act. 8–9.)

The Examiner rejected claims 5 and 14 under 35 U.S.C. § 103(a) as being unpatentable over Fitzmaurice and Matejka et al, *Community Commands: Command Recommendations for Software Applications*, UIST'09 (2009). (Final Act. 9–10.)

The Examiner rejected claim 10 under 35 U.S.C. § 103(a) as being unpatentable over Fitzmaurice and Shivaji-Rao et al. (US 2008/0228685 A1, pub. Sep. 18, 2008). (Final Act. 10.)

The Examiner rejected claim 11 under 35 U.S.C. § 103(a) as being unpatentable over Fitzmaurice and Boehler et al. (US 2011/0126154 A1, pub. May 26, 2011). (Final Act. 10–11.)

The Examiner rejected claims 9–15 under 35 U.S.C. § 101 as being directed to non-statutory subject matter. (Final Act. 11–12.)

### ISSUES ON APPEAL

Appellants' arguments in the Appeal Brief present the following dispositive issues:<sup>2</sup>

*Issue One:* Whether the Examiner erred in finding Fitzmaurice discloses the independent claim 1 limitations, “generating a combined command-to-command transition table using one or more command log views of the user specific data and the community data,” and “selecting predicted commands from the combined command-to-command transition

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<sup>2</sup> Rather than reiterate the arguments of Appellants and the positions of the Examiner, we refer to the Appeal Brief (filed May 27, 2016) (herein, “App. Br.”); the Reply Brief (filed Dec. 19, 2016) (herein, “Reply Br.”); the Final Office Action (mailed Oct. 22, 2015) (herein, “Final Act.”); and the Examiner’s Answer (mailed Oct. 20, 2016) (herein, “Ans.”) for the respective details.

table,” and the commensurate limitations of independent claims 9 and 16. (App. Br. 3–7.)

*Issue Two:* Whether the Examiner erred in rejecting claims 9–15 as being directed to non-statutory subject matter. (App. Br. 8–9.)

## ANALYSIS

We have reviewed the Examiner’s rejections in light of Appellants’ arguments that the Examiner erred. We disagree with Appellants’ arguments directed to the anticipation and obviousness rejections, and we adopt as our own (1) the pertinent findings and reasons set forth by the Examiner in the Action from which this appeal is taken (Final Act. 2–11) and (2) the corresponding findings and reasons set forth by the Examiner in the Examiner’s Answer in response to Appellants’ Appeal Brief. (Ans. 3–5.) We concur with the applicable conclusions reached by the Examiner, and emphasize the following. However, as discussed below, we agree with Appellants that the Examiner’s rejection pursuant to 35 U.S.C. § 101 is in error.

### *Issue One*

Appellants argue the Examiner errs in rejecting the independent claims as anticipated by Fitzmaurice because that reference does not disclose “**generating** a combined command-to-command transition table using [a user’s command history and a community command history].” (App. Br. 4.) Appellants’ Specification does not define “command-to-command transition table,” but provides an example:

	$C_1$	$C_2$	$C_3$	$C_4$	$C_5$	...	$C_n$
$C_1$	.0002	.0275	.0005	.0002	<b>.1582</b>		.0009
$C_2$	<b>.2007</b>	.0002	.0002	<b>.6311</b>	.0005		.0002
$C_3$	.0478	.0001	.0005	<b>.5682</b>	.0223		.0004
$C_4$	<b>.2343</b>	.0114	.0004	<b>.1989</b>	<b>.1853</b>		<b>.0884</b>
$C_5$	.0003	.0005	.0007	.0004	.0005		.0006
...							
$C_B$	<b>.0674</b>	.0002	.0018	<b>.4866</b>	<b>.2100</b>		.0060

(Spec. ¶ 56.) This table illustrates a command-to-command transition table, in which the rows represent an executed command and each column represents an occurrence rate for a given command to be the next command after the executed command. (Spec. ¶¶ 55–56.) For example, if the last executed command was  $C_2$ , then  $C_4$  is the highest probability next action based on the occurrence rate in that row. (Spec. ¶ 58.)

For the limitations at issue, the Examiner relies on a “community-frequency table” illustrated as Figure 2C in Fitzmaurice:

222

User ID 224	Command Name 226	Previous Command 228	Frequency 230	Design Context 232
	.			
	.			
	.			
	.			

234

FIGURE 2C

Figure 2C illustrates a community-frequency table for storing frequency information, with each entry 234 in the table storing, for a given user 224 in a given design context 232, the frequency 230 that the command 226 is preceded by the command 228. (Final Act. 2–3; Fitzmaurice Fig. 2C, ¶¶ 15, 38.) For any given command that a user executes, a “recommendation engine” uses the community-frequency table to compute the most likely one or more commands that would follow that command, given the frequency of that command sequence as indicated by the stored statistics. (Fitzmaurice, Figs. 4A, 4B, ¶ 49.) The community-frequency table is based on the command use information of multiple users in a community of users. (Fitzmaurice ¶¶ 23, 34, 36–42.) For any given user, the pertinent community is based on “pre-configured preferences associated with the designer [*i.e.*, user] indicat[ing] other designers or groups of designers in the community whose frequency information is of interest to the designer.” (Fitzmaurice ¶ 43.)

Appellants argue the Examiner errs because:

Instead of combining the user specific data and the community data from various command log views as claimed, Fitzmaurice separately computes the frequency percentage associated with each of the different commands from a user's records and from a community record of other designers or groups of designers that are related to the user (see Fitzmaurice at paragraphs [0049] and [0052]). Recommended commands are then separately selected from these two datasets to provide user recommendation lists based on user data, recommendation lists based on community data (of a set of users), and recommendation lists based on particular expert data (see Fitzmaurice Figures 4A and 4B and corresponding text).

(App. Br. 3–4.) However, as discussed above, the community-frequency table disclosed in Fitzmaurice does in fact combine the command use

information of all users in the community of users to compute the frequency percentage associated with each command. (Fitzmaurice ¶¶ 23, 34, 36–43.) Appellants focus on the fact that the claims require combining “user specific data and community data,” where the claimed “user” is one particular user in a group of users and the claimed “community” is made up of the remaining users in the community. The community-frequency table of Fitzmaurice satisfies this requirement because it contains the combined information of all users in the community, which of necessity includes any given particular user that, from the vantage point of the claims, would be the source of “user specific data.”

Appellants’ reliance on the fact that recommended commands are separately selected, via the user interfaces depicted at Figures 4A and 4B of Fitzmaurice, from user-specific data and community data, is not persuasive of Examiner error. (App. Br. 4; *see also* Reply Br. 7.) The “community recommendation list view” of Figure 4B of Fitzmaurice is generated from data copied from the above discussed community-frequency table. (Fitzmaurice Fig. 4B, ¶¶ 43–45, 53, 59–60.) Under a broad but reasonable interpretation, this discloses “selecting predicted commands from the combined command-to-command transition table.” Contrary to Appellants’ argument, the claims do not require selecting predicted commands based on the user specific data in the combined command-to-command transition table; selection based on only community data from the combined command-to-command transition table meets the claim requirements. As Appellants admit:

Since the claim uses the transitional term of “comprising”, the claim does not preclude displaying only community-data-derived commands. However, the claim does require at least the



displaying of a command selected from the combined command-to-command transition table.

(Reply Br. 7.)

Accordingly, we sustain the Examiner's anticipation rejections of independent claims 1, 9, and 16.

*Issue Two*

Independent claim 9 is directed to “A computer readable storage medium having instructions stored thereon that, when executed by a processor, perform a method comprising. . . .” (App. Br. 12.) The Examiner rejects claim 9, and the claims depending therefrom, as encompassing “transitory embodiments.” (Final Act. 11–12.) Appellants rely on *Ex parte Mewherter*, 107 USPQ2d 1857 (PTAB 2013), and in particular on the holding that “machine readable storage medium” would not necessarily encompass transitory embodiments if there is express intent in applicant's specification to limit that phrase to non-transitory media. 107 USPQ2d at 1862, n.5. In particular, Appellants rely on the statement in the Specification, “‘Computer-readable storage media’ do not consist of carrier waves or propagating signals.” (Spec. ¶ 161.)

The Examiner concludes:

The applicant's definition thus only excludes electrical signals and not all transitory embodiments. As an example, a sound wave is not an electrical quantity, nor is it a radio signal, but it is a transitory embodiment of a computer-readable media.

(Ans. 5.) We do not agree with the Examiner's conclusion. A sound wave, for example, reasonably falls within the Specification's exclusion of “propagating signals.” Therefore, we do not sustain the Examiners rejections pursuant to 35 U.S.C. § 101.

### CONCLUSION

For the reasons stated above, we sustain the Examiner's anticipation rejections of independent claims 1, 9, and 16 over Fitzmaurice.

We also sustain the anticipation rejections of claims 2, 6–8, 15, 17, and 18 over Fitzmaurice, and the obviousness rejections of claims 3, 12, and 20 over Fitzmaurice and Perrow, of claims 4 and 13 over Fitzmaurice and Harte, of claims 5 and 14 over Fitzmaurice and Matejka, of claim 10 over Fitzmaurice and Shivaji-Rao, and of claim 11 over Fitzmaurice and Boehler, which rejections are not argued separately with particularity.

Also for the reasons stated above, we do not sustain the Examiner's rejections of claims 9–15 as being directed to non-statutory subject matter.

Because we have affirmed at least one ground of rejection with respect to each claim on appeal, the Examiner's decision is affirmed. *See* 37 C.F.R. § 41.50(a)(1).

### DECISION

We affirm the Examiner's decision rejecting claims 1–18 and 20.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv). *See* 37 C.F.R. § 41.50(f).

AFFIRMED